

**REMARKS**

Applicants have cancelled claim 63; and have amended claims 61, 84-87, 90, 94, 99, 115, 116, 119, 121, 122, 127, 132, 136, 137, and 139. Claims 61, 62, 64-113, 115, 116, and 119-146 are pending in the above-captioned patent application, of which claims 61, 101-108, 115, and 139-146 are presented for examination, and claims 62, 64-100, 109-113, 116, 118, and 120-138 have been withdrawn from consideration.

The examined claims, as pending before this Amendment, are believed to be allowable over the references cited in the rejections contained in the Office Action of November 17, 2005. Nevertheless, claims 61, 84-87, 90, 94, 99, 115, 116, 119, 121, 122, 127, 132, 136, 137, and 139 have hereby been amended to clarify certain aspects related to the claimed invention and to correct informalities.

**§103(a) Rejection of Claims 61, 101, 102, 105-108, 115, 139, 140, and 143-146**

The Examiner rejected claims 61, 101, 102, 105-108, 115, 139, 140, and 143-146 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,290,566 to Gabai et al. ("*Gabai et al.*") in view of U.S. Patent No. 6,850,555 to Barclay ("*Barclay*"). Applicants respectfully traverse this rejection because a *prima facie* case of obviousness has not been established.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined)

must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

Claims 61, 101, 102, and 105-108

Claim 61 is allowable over *Gabai et al.* and *Barclay* for at least the reason that *Gabai et al.* and *Barclay* fail to teach or suggest a **toy system** comprising, inter alia, an **encoder** that comprises, inter alia, **"a modulator operable to modulate the data signal before being spread by said spreader or to modulate the spread signal, onto at least one carrier signal within an audible frequency band of 20 Hz and 20 kHz,"** as recited in independent claim 61 as amended (emphasis added).

*Gabai et al.* discloses a "toy including a fanciful figure having a capacity to perform an action, and action control circuitry operative to control the fanciful figure to perform the action" (Abstract).

*Barclay* discloses a signalling system used to update the prices of goods that are electronically displayed on supermarket shelves. A first signalling device, which receives electrical message data, has a spread spectrum encoder for encoding the received message data. (Abstract.) The resulting binary voltage signal is amplified and "applied directly to loud speaker 11, without modulating the signal onto a carrier signal" (Col. 3, lines 54-58). A second signalling device, which receives acoustic signals from the transmission medium, has means for converting the received acoustic signals into

corresponding electrical signals and a spread spectrum decoder for decoding the received signals. A message regenerator regenerates the message data from the signals output by the decoder. (Abstract.)

There would not have been motivation for one of ordinary skill to combine the teachings of *Gabai et al.* with the teachings of *Barclay* to derive the toy system recited in claim 61 because *Gabai et al.* is concerned with toys (Abstract). *Barclay*, on the other hand, is concerned with the problem of updating the prices displayed on supermarket shelves using data tags (Col. 1, lines 16-24). The Examiner is relying on impermissible hindsight, based on the claimed invention, to attempt to reconstruct the claimed invention from these disparate teachings. Thus, there would not have been motivation to combine the references as suggested by the Examiner.

Furthermore, there is no motivation to combine the references as suggested by the Examiner because *Barclay* teaches away from such a combination. *Tec Air, Inc. v. Denso Mfg. Michigan, Inc.*, 192 F.3d 1353, 1360, 52 USPQ2d 1295, 1298 (Fed. Cir. 1999). *Barclay* teaches away from an encoder comprising a “modulator,” as recited in claim 61, because *Barclay* teaches that “[t]he requirement of having to use a demodulation circuit on its own or together with a modulation circuit, significantly increases the complexity and hence the cost of each of the tags” (Col. 1, lines 35-39). Thus, since *Barclay* teaches away from the encoder comprising the “modulator” of claim 61, there is no suggestion to combine the references as suggested by the Examiner.

Moreover, the Examiner acknowledges that “Gabai does not explicitly disclose the method of transmission claimed by the Applicant [prior to the present amendment]”

(Office Action, page 3, paragraph 2). *Barclay* fails to make up for the deficiencies of *Gabai et al.* because *Barclay* also does not teach or suggest an encoder that comprises, inter alia, “a modulator operable to modulate the data signal before being spread by said spreader or to modulate the spread signal,” as required by claim 61.

There is no teaching or suggestion in *Barclay* that the first signalling device has “a modulator operable to modulate the data signal before being spread by said spreader or to modulate the spread signal,” as recited in claim 61. For example, applying a binary voltage signal “directly to loud speaker 11, without modulating the signal onto a carrier signal” (Col. 3, lines 54-58; emphasis added) is different from modulating a data signal before being spread or modulating the spread signal.

Thus, since *Gabai et al.* and *Barclay* fail to teach or suggest, alone or in combination, each and every element of independent claim 61, or to provide motivation to combine the references as suggested by the Examiner, claim 61 and claims 101, 102, and 105-108 dependent therefrom are allowable over *Gabai et al.* and *Barclay* under § 103(a).

Claims 115, 139, 140, and 143-146

Claim 115 is allowable over *Gabai et al.* and *Barclay* because *Gabai et al.* and *Barclay* fail to teach or suggest a **toy** comprising, inter alia, “**a decoder operable to de-spread and demodulate the electrical signal obtained from said acousto-electric transducer, in order to regenerate the data signal,**” (emphasis added), as recited in independent claim 115 as amended.

There would not have been motivation for one of ordinary skill to combine the teachings of *Gabai et al.* with the teachings of *Barclay* to derive the toy recited in claim 115. *Gabai et al.* is concerned with toys (Abstract) while *Barclay* is concerned with the different problem of updating the prices displayed on supermarket shelves using data tags (Col. 1, lines 16-24). Thus, there would not have been motivation to combine the references as suggested by the Examiner.

Furthermore, the references do not provide motivation to combine the references as suggested by the Examiner because *Barclay* teaches away from the combination suggested by the Examiner. *Barclay* teaches away from a decoder operable to “demodulate the electrical signal,” as recited in claim 115, because *Barclay* teaches that “[t]he requirement of having to use a demodulation circuit on its own or together with a modulation circuit, significantly increases the complexity and hence the cost of each of the tags” (Col. 1, lines 35-39). Thus, there is no suggestion to combine the references as suggested by the Examiner.

Moreover, the Examiner acknowledges that “Gabai does not explicitly disclose the method of transmission claimed by the Applicant” (Office Action, page 3, paragraph 2). *Barclay* fails to make up for the deficiencies of *Gabai et al.* because *Barclay* also does not teach or suggest “a decoder operable to de-spread and demodulate the electrical signal obtained from said acousto-electric transducer,” as required by claim 115. There is no teaching or suggestion in *Barclay* that any of the components of the second signalling device constitutes “a decoder operable to de-spread and demodulate the electrical signal,” as recited in claim 115.

Thus, since *Gabai et al.* and *Barclay* do not teach or suggest, alone or in combination, each and every element of independent claim 115, or to provide motivation to combine the references as suggested by the Examiner, claim 115 and claims 139, 140, and 143-146 dependent therefrom are allowable over *Gabai et al.* and *Barclay* under § 103(a).

### **§103(a) Rejection of Claims 103 and 141**

Applicants respectfully traverse the rejection of claims 103 and 141 under 35 U.S.C. § 103(a) as unpatentable over *Gabai et al.* in view of *Barclay* and in further view of U.S. Patent No. 4,840,602 to Rose (“*Rose*”). *Gabai et al.*, *Barclay*, and *Rose* do not teach or suggest, alone or in combination, each and every element of independent claim 61, from which claim 103 depends, or independent claim 115, from which claim 141 depends.

### **Claim 103**

The shortcomings of *Gabai et al.* and *Barclay* in relation to independent claim 61 have been discussed above. *Rose* does not make up for the deficiencies of *Gabai et al.* and *Barclay* because *Rose* also fails to teach or suggest a toy system comprising, inter alia, an encoder that comprises, inter alia, “a modulator operable to modulate the data signal before being spread by said spreader or to modulate the spread signal, onto at least one carrier signal within an audible frequency band of 20 Hz and 20 kHz,” as recited in claim 61.

Rose appears to be silent on the matter of the “modulator” recited in claim 61, and the Examiner does not rely on *Rose* for any asserted teaching or suggestion of these limitations.

Thus, since *Gabai et al.*, *Barclay*, and *Rose* fail to teach or suggest each and every element of independent claim 61, or to provide motivation for one of ordinary skill to combine these references to derive the toy system recited in claim 61, claim 103 is allowable over *Gabai et al.*, *Barclay*, and *Rose* at least due to its dependence from claim 61.

#### Claim 141

The shortcomings of *Gabai et al.* and *Barclay* in relation to independent claim 115 have been discussed above. *Rose* does not make up for the deficiencies of these references because *Rose* also fails to teach or suggest a toy comprising, inter alia, “a decoder operable to de-spread and demodulate the electrical signal obtained from said acousto-electric transducer, in order to regenerate the data signal,” as recited in claim 115.

*Rose* appears to be silent on the matter of the “decoder operable to de-spread and demodulate the electrical signal” recited in claim 115, and the Examiner does not rely on *Rose* for any asserted teaching or suggestion of these limitations.

Thus, since *Gabai et al.*, *Barclay*, and *Rose* fail to teach or suggest each and every element of independent claim 115, or to provide motivation for one of ordinary skill to combine these references to derive the toy recited in claim 115, claim 141 is

allowable over *Gabai et al.*, *Barclay*, and *Rose* at least due to its dependence from claim 115.

### **§103(a) Rejection of Claims 104 and 142**

Applicants respectfully traverse the rejection of claims 104 and 142 under 35 U.S.C. § 103(a) as unpatentable over *Gabai et al.* in view of *Barclay*, in further view of *Rose*, and in further view of U.S. Patent No. 5,314,336 to *Diamond et al.* (“*Diamond et al.*”). *Gabai et al.*, *Barclay*, *Rose*, and *Diamond et al.* do not teach or suggest, alone or in combination, each and every element of independent claim 61, from which claim 104 depends, or independent claim 115, from which claim 142 depends.

### **Claim 104**

The shortcomings of *Gabai et al.*, *Barclay*, and *Rose* in relation to claim 61 have been discussed above. *Diamond et al.* does not make up for the deficiencies of *Gabai et al.*, *Barclay*, and *Rose* because *Diamond et al.* also fails to teach or suggest a toy system comprising, inter alia, an encoder that comprises, inter alia, “a modulator operable to modulate the data signal before being spread by said spreader or to modulate the spread signal, onto at least one carrier signal within an audible frequency band of 20 Hz and 20 kHz,” as recited in claim 61.

*Diamond et al.* appears to be silent on the matter of the “modulator” recited in claim 61, and the Examiner does not rely on *Diamond et al.* for any asserted teaching or suggestion of these limitations.

Thus, since *Gabai et al.*, *Barclay*, *Rose*, and *Diamond et al.* fail to teach or suggest each and every element of independent claim 61, or to provide motivation for



one of ordinary skill to combine these references to derive the toy system recited in claim 61, claim 104 is allowable over *Gabai et al.*, *Barclay*, *Rose*, and *Diamond et al.* at least due to its dependence from claim 61.

#### Claim 142

The shortcomings of *Gabai et al.*, *Barclay*, and *Rose* in relation to independent claim 115 have been discussed above. *Diamond et al.* does not make up for the deficiencies of these references because *Diamond et al.* also fails to teach or suggest a toy comprising, inter alia, "a decoder operable to de-spread and demodulate the electrical signal obtained from said acousto-electric transducer, in order to regenerate the data signal," as recited in claim 115.

*Diamond et al.* appears to be silent on the matter of the "decoder operable to de-spread and demodulate the electrical signal" recited in claim 115, and the Examiner does not rely on *Diamond et al.* for any asserted teaching or suggestion of these limitations.

Thus, since *Gabai et al.*, *Barclay*, *Rose*, and *Diamond et al.* fail to teach or suggest each and every element of independent claim 115, or to provide motivation for one of ordinary skill to combine these references to derive the toy recited in claim 115, claim 142 is allowable over *Gabai et al.*, *Barclay*, *Rose*, and *Diamond et al.* at least due to its dependence from claim 115.

**CONCLUSION**

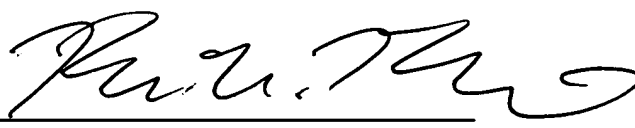
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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